

## 1310 nm InGaAs PIN-TO

### DI1X-8082-x Series

**TYPE NAME: DI1X-8082-J**

#### **Product Description:**

The LuxNet DI1A-808x-x PIN-TO is designed for telecom/datacom communication applications. This device packaged our high-speed 1310 nm PIN detector into a TO-46 header with cap window. The product is designed for optical communication systems with LD light source. The PIN-TO can be integrated with different types of ports engaged with a fiber connector to transmit the light from fiber through a receptacle into the PIN detector with high coupling efficiency.

#### **Product Specifications:**

Absolute Maximum Ratings (T = 25°C):

Parameter	Symbol	Unit	Min.	Max.	Note
Operating Temperature	T <sub>op</sub>	°C	-40	85	
Storage Temperature	T <sub>stg</sub>	°C	-40	100	
Solder Reflow Temperature	T <sub>s</sub>	°C		260	10 seconds max.
Forward Current	I <sub>f</sub>	mA		10	
Reverse Voltage	V <sub>R</sub>	V		20	

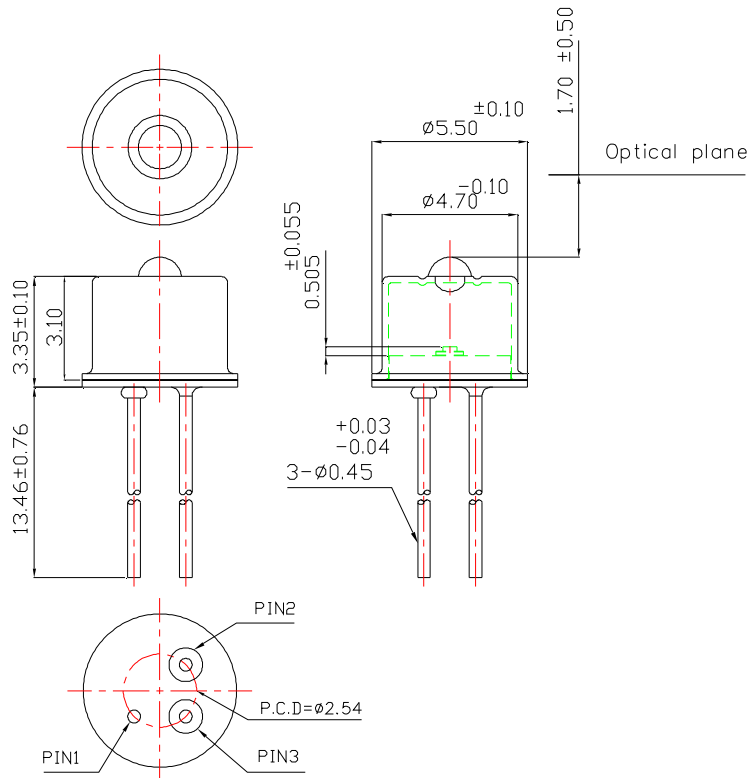
Electro-Optical Characteristics (T = 25°C, unless noted otherwise):

Parameter	Symbol	Unit	Min.	Typ.	Max.	Test Condition
Active diameter	D	um	78	80	82	
Responsivity	R	A/W	0.85 0.90	0.90 0.95		λ = 1310 nm λ = 1550 nm
Dark Current	I <sub>D</sub>	nA		0.15	1.0	V <sub>R</sub> = 5 V
Breakdown Voltage	V <sub>B</sub>	V	20			I <sub>R</sub> = 1 μA
Capacitance	C	pF		1.1	1.3	V <sub>R</sub> =2V, f=1MHz
Rise/Fall Time	τ <sub>r</sub> /τ <sub>f</sub>	ps		145	170	V <sub>R</sub> =2V (20%-80%) R <sub>L</sub> =50Ω
Cut-off Frequency	f <sub>C</sub>	GHz	1.85			V <sub>R</sub> =2V, R <sub>L</sub> =50Ω

\* Specifications are subject to change without notice.  
\* Screening per customer-specified reject limits is available.

**DI1X-8082-J (PIN-TO)**

**Dimensions:** (mm)  
*All dimensions are nominal*



**PINOUT**

DI1X-8082-J	
Pin Number	Function
1	GND
2	PD Anode (PD+)
3	PD Cathode (PD-)

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